UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
JOHN F. KENNEDY FEDERAL BUILDING
BOSTON, MASSACHUSETTS 02203-0001

July 28, 1997

Mark Evans, Remedial Project Manager
U.S. Department of the Navy
Naval Facilities Engineering Command
Northern Division
10 Industrial Highway
Code 1823, Mail Stop 82
Lester, PA 19113-2090

Re: Responses to EPA Comments on the Data Gap Investigation Report for Goss Cove Landfill

Dear Mr. Evans

EPA reviewed the responses to our letter dated April 23, 1997 regarding the *Draft Data Gap Investigation Report for the Goss Cove Landfill* Page-specific comments are provided in Attachment A.

The series of site maps at a scale of 1"=50' (Figures 2-1, 2-2, 3-2, and 3-3) could be improved by showing the extent of bedrock outcrop on each map, as shown in Figure 2-2 The configuration of the bedrock surface is critical to an understanding of contaminant movement at the site. Also, at least one of the above-mentioned maps (such as Figure 2-1) should show structure contours on the bedrock surface

The cross-sections shown in Figures 1-6 and 1-7 are useful, but a third section should be drawn along the bedrock outcrop east of Shark Boulevard, through well cluster 8MW8S/8MW8D, 8MW10S, 8MW9S, and the dry cleaners Also, Figure 1-5 has no north arrow and shows well 8MW6D north (presumably) of well 8MW6S, whereas the cross-section shows well 8MW6D located south of well 8MW6S

I look forward to working with you and the Connecticut Department of Environmental Protection toward the cleanup of the Goss Cove area Please do not hesitate to contact me at (617) 573-5777 should you have any questions

Sincerely,

Kymberlee Keckler, Remedial Project Manager
Federal Facilities Superfund Section

Attachment

cc: Mark Lewis, CTDEP, Hartford, CT
Andy Stackpole, NSBNL, Groton, CT
Patti Lynne Tyler, USEPA, Lexington, MA
Ken Finkelstein, NOAA, Boston, MA
Jennifer Hayes, Gannett Fleming, Harrisburg, PA
Corey Rich, Brown & Root, Pittsburgh. PA

ATTACHMENT A

Page	Comment
p. 3-10 (3)	The proposed response contains incorrect azimuths (*e.g.*, it incorrectly states northeast) The most significant PCE contamination does extend from southeast to northwest, through monitoring well 8MW9S, 8MW10S, and 8MW8S/8MW8D This southeast to northwest axis does not correspond to the general direction of groundwater flow toward Goss Cove (northeast to southwest), and in fact is nearly perpendicular to it. The lack of correspondence between the axis of contamination and the axis of groundwater flow simply indicates that a mechanism other than dissolved phase groundwater flow is governing the bulk of the PCE contamination at the site Such a mechanism is to be expected with a dense liquid such as PCE near a potential source of pure product release, especially in a shallow fractured bedrock environment. DNAPL flow does appear likely (as stated on page 3-13) and could easily occur at right angles to the prevailing groundwater flow Further, DNAPL flow is commonly governed by bedrock topography and fracture patterns more than by groundwater flow directions Two of the most prominent fracture lines identified in Figure 3-1, Fracture Trace Map, trend southeast to northwest, as does the general trend of the bedrock outcrop near wells 8MW8S and 8MW8D The dry cleaners located approximately 150 feet southeast of well cluster 8MW8S/8MW8D is a likely source of PCE contamination, however, as discussed previously it cannot be considered as the only source without further groundwater sampling to the northeast of the cluster (including the Tank Farms), up the groundwater gradient The possibility of PCE transport as DNAPL flow needs to be discussed in paragraph 1 on page 3-10 The first 2 bullets following this should not be changed, but the third bullet should be deleted
p 4-1, §4.2	The proposed response adequately addresses the comment with regard to the need for additional groundwater investigations that will be conducted as part of a base-wide evaluation of groundwater Such an investigation should include seismic surveys to establish the bedrock configuration near the intersection of Shark Boulevard and Crystal Lake Road The conclusions regarding the direction of contaminant migration require further support as discussed above